Amendments to the Claims

1. (Currently Amended) An apparatus ~~Apparatus~~ for detecting wafer flat shift, comprising:

a plurality of sensors and a relay ~~circuit~~ for operating a solenoid in a power supply circuit for shutting off wafer fabrication equipment, the sensors for detecting a shift in wafer flat position; and the power supply circuit for shutting off the wafer fabrication equipment; wherein the relay receives signals from the sensors and the solenoid operated by the relay to open at least one door of the wafer fabrication equipment to release a corresponding wafer for further processing; and a wafer flat shift shutting off at least one of the signals from the sensors.

2. (Currently amended) The apparatus of claim 1, ~~further comprising:~~ wherein

the sensors being adjusted to detect a wafer flat shift in a plurality of directions of angular displacement.

3. (Currently amended) The apparatus of claim 1, ~~further comprising:~~ wherein

the sensors being adjusted to detect a wafer flat shift in a range of $(2)(0.9^0)$ to $(5)(0.9^0)$ angular displacement.

4. (Currently amended) The apparatus of claim 1, further comprising:

a frame; and

an adjustable mounting mechanism mounting each of the sensors on the frame for adjustment along substantially orthogonal axes.

5. (Previously Presented) The apparatus of claim 1, further comprising:

a frame; and

the sensors being adjustably mounted on the frame.

6. (Cancelled.)

7. (Currently Amended) A method of detecting wafer flat shift comprising the steps of:[[;]]

detecting a wafer flat shift by an ~~optical~~ beam sensor, sending a signal from the sensors to a solenoid through a relay; ~~and~~

operating the solenoid by the relay to open at least one door of the wafer fabrication equipment to release a corresponding wafer for further processing;

shutting off at least one of the signals from the sensors by the wafer flat shift; and

shutting off a wafer fabrication equipment when the wafer flat shift exceeds a set amount.

8. (Previously Presented) The method as recited in claim 7, further comprising the step of:

detecting a wafer flat shift in a plurality of directions of angular displacement.

9. (Previously Presented) The method as recited in claim 7, further comprising the step of:

detecting the wafer flat shift by optical beam sensors.

10. (Previously Presented) The method as recited in claim 7, further comprising the step of:

detecting a wafer flat shift in a range of $(2)(0.9^0)$ to $(5)(0.9^0)$ angular displacement.

11. (Previously Presented) The method as recited in claim 7, further comprising the

steps of:

detecting the wafer flat shift by optical beam sensors; and

adjusting the positions of the sensors.

12. (Cancelled.)

13. (Currently Amended) The method as recited in ~~claim 12~~ claim 7, further comprising the step of:

detecting a wafer flat shift of (2)(0.9^0) angular displacement.

14. (Previously Presented) The method as recited in ~~claim 12~~ claim 7, further comprising the step of:

detecting a wafer flat shift of (5)(0.9^0) angular displacement.

15. (Currently Amended) A control circuit, comprising:

sensors to detect an edge of a wafer flat on a wafer;

~~a power supply supplying power to the sensors;~~

a relay activated by outputs of the sensors;

a solenoid activated by the relay to unlock a door for exit of the wafer to equipment for further wafer fabrication; and

at least one of the sensors sensing a wafer flat shift, which shuts off the equipment.

16. (Previously Presented) The control circuit of claim 15, further comprising:

the sensors being set to detect a wafer flat shift of (2)(0.9^0) angular displacement.

17. (Previously Presented) The control circuit of claim 15, further comprising:

the sensors being set to detect a wafer flat shift of (5)(0.9^0) angular displacement.

18. (Previously Presented) The control circuit of claim 15, further comprising:
the sensors being mounted for adjustment along orthogonal axes corresponding to the a wafer flat shift in angular displacement.

19. (Previously Presented) The control circuit of claim 15, further comprising:
the sensors being adjustable on the frame.

20. (Previously Presented) The control circuit of claim 15, further comprising:
the sensors being adjustable along orthogonal axes.